

## REMARKS

This is meant to be a complete response to the Office Action mailed December 28, 2007, as well as Statements of the Substance of the Interviews. In the Office Action, the Examiner required Applicant to provide further information under 37 C.F.R. §1.105. The Examiner also rejected Applicant's claims 1, 3-11, 19 and 21-23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-13 and 15-16 of US Patent No. 7,288,246. The Examiner further rejected claims 1, 3-11, 19 and 21-23 under 35 U.S.C. §112, ¶2.

### Applicant's Response to the Request for Information Under 37 C.F.R. §1.105

In the Office Action, the Examiner stated that Applicant was "requested to clarify which compound(s) listed in Claim 3 correspond to which inhibitor (e.g., glutamine synthetase inhibitor) listed in Claim 1".

In response to the Examiner's request, claims 3 and 21 have been canceled herein, without prejudice, and new claims 24-31 have been added. In this manner, each dependent claim recites a Markush group for each inhibitor listed in Claims 1 and 19. That is, claims 24 and 28 recite glutamine synthetase inhibitors; claims 25 and 29 recite glutamate dehydrogenase inhibitors; claims 26 and 30 recite pyruvate carboxylase inhibitors; and claims 27 and 31 recite

glial cell tricarboxylic acid cycle inhibitors. Support for these specific amendments to the claims can be found in the Specification as originally filed at Paragraph [0045].

Therefore, Applicant respectfully submits that he has fully complied with the Examiner's request under 37 C.F.R. §1.105.

#### Applicant's Response to the Double Patenting Rejection

In the Office Action, the Examiner also rejected Applicant's claims 1, 3-11, 19 and 21-23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-13 and 15-16 of US Patent No. 7,288,246.

In response to the rejection, a Terminal Disclaimer is being filed herewith which complies with each and every provision of 37 C.F.R. §1.321 and 37 C.F.R. §1.130(b) and which disclaims the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 7,288,246. Applicant respectfully submits that the double-patenting rejection of pending claims 1, 4-11, 19 and 22-23 has been obviated by the filing of the Terminal Disclaimer and requests reconsideration and withdrawal of such rejection of the claims.

Applicant's Response to the 35 U.S.C. §112, ¶2 Rejections

In the Office Action, the Examiner rejected Applicant's claims 1, 3-11, 19 and 21-23 under 35 U.S.C. §112, ¶2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In the rejection, the Examiner stated that:

- (A) Claims 1 and 19 are unclear with respect to inhibitor of neurotransmitter synthesis, because in each of Claims 1 and 19 are claimed inhibitors of neurotransmitter synthesis as the materials that inhibit enzymes (e.g., glutamine synthetase, glutamate dehydrogenase, pyruvate carboxylase), not the inhibition of the gene/expression responsible for the synthesis of claimed enzymes. Furthermore, inhibition of an enzyme activity is not art-known to be synthesis of the same enzyme because enzyme activity inhibition and enzyme synthesis inhibition are art-known to be two different phenomenon controlled by different parameters.
- (B) Claim 1 is rendered unclear because the correspondence between Claims 1 and 3 that are two differently defined Markush groups is unclear. That is, it is not clear if the Markush group of claim 3 has clear antecedent basis in the Markush group of claim 1.
- (C) Claim 19 is rendered unclear because the correspondence between Claims 19 and 21 that are two differently defined Markush groups is unclear. That is, it is not clear if the Markush group of claim 21 has clear antecedent basis in the Markush group of claim 19.

Applicant respectfully traverses the rejection as set forth in (A). However, in order to expedite issuance of a patent from the subject application, claims 1 and 19 have been amended herein to recite "an inhibitor of glutamine

synthetase enzyme activity”, “an inhibitor of glutamate dehydrogenase enzyme activity”, and “an inhibitor of pyruvate carboxylase enzyme activity”.

In response to (B) and (C), claims 3 and 21 have been canceled herein, and new claims 24-31 have been added. Applicant respectfully submits that claims 1 and 19 are now clear, and that the Markush groups of claims 24-27 have clear antecedent basis in claim 1, while the Markush groups of claims 28-31 have clear antecedent basis in claim 19.

Therefore, Applicant respectfully submits that the claims as now pending are definite and particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §112, ¶2 rejection of the claims.

Statement of the Substance of the Interview Held December 21, 2007

On December 21, 2007, the Examiner called Applicant’s representative, Kathryn Hester, and presented and discussed possible amendments to the instantly presented claims to bring the instant application in a better condition for allowance. However, the Examiner’s requested amendments were substantive in nature, and therefore Applicant’s representative requested an

Office Action so that the Examiner's suggestions could be more thoroughly reviewed by Applicant.

Statement of the Substance of the Interview Held April 2, 2008

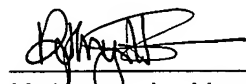
On April 2, 2008, a telephonic interview was conducted between the Examiner and Applicant's representative, Douglas Sorocco, to discuss proposed amendments to the claims, which were faxed to the Examiner on March 18, 2008. The proposed amendments were discussed, and the Examiner advised that the claimed language in proposed claims still does not distinguish between the inhibitor of enzyme activity and the inhibitor of enzyme production or expression of enzyme in or by a given cell.

## **CONCLUSION**

This is meant to be a complete response to the Office Action mailed December 28, 2007, as well as Statements of the Substance of the Interviews. Applicant respectfully submits that each and every rejection of the claims has been overcome. Further, Applicant respectfully submits that claims 1, 4-11, 19 and 22-31, as now pending, are patentable over the art of record and are now in a condition for allowance. Favorable action is respectfully solicited.

Should the Examiner have any questions regarding this Amendment, or the Remarks contained therein, Applicant's representative would welcome the opportunity to discuss the same with the Examiner.

Respectfully submitted,



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